Other journals in brief

A selection of abstracts of clinically relevant papers from other journals.
The abstracts on this page have been chosen and edited by Reena Wadia.

How safe are e-cigarettes?

Holliday R, Chaffee B W, Jakubovics N S, Kist R, Preshaw P M. Electronic Cigarettes and Oral Health. *J Dent Res* 2021; DOI: 10.1177/00220345211002116. Online ahead of print.

Studies reveal potential oral health harms of e-cigarettes.

E-cigarettes have become increasingly popular over the past decade. They are sometimes regarded as a less harmful alternative to tobacco smoking, and there is some evidence of their potential role as a smoking cessation aid. However, there are concerns about their health consequences, particularly in non-smokers and long-term use. There have been an increasing number of studies conducted to explore their oral health effects. *In vitro* studies report a range of cellular effects, but these are much less pronounced than those resulting from exposure to tobacco smoke. Microbiological studies have indicated that e-cigarette users have a distinct microbiome, and there is some indication this may be more pathogenic compared to non-users. Evidence of oral health effects from clinical trials is limited. Epidemiological studies highlight concerns over oral dryness, irritation, and gingival diseases. Interpreting data from e-cigarette studies is challenging, given the different populations investigated and the constant emergence of new products. Overall, studies reveal potential oral health harms, underscoring the importance of efforts to reduce use in non-smokers. In smokers who are using e-cigarettes as an aid to help them quit, the benefits of quitting tobacco smoking may outweigh any negative impacts of e-cigarette use, particularly in the short term.

<https://doi.org/10.1038/s41415-021-3078-9>

E-cigarette product placement

Majmudar A, Unger J B, Cruz T B, Kirkpatrick M G, Allem J P. Exposure to E-Cigarette Product Placement in Music Videos Is Associated With Vaping Among Young Adults. *Health Educ Behav* 2021; DOI: 10.1177/10901981211003867. Online ahead of print.

Restricting e-cigarette product placement or imagery in music videos may minimise marketing exposure and risk for vaping among young adults.

The prevalence of e-cigarette product placement in music videos is on the rise and currently unregulated. This group examined associations between self-reported levels of exposure to music videos with any e-cigarette product placement or imagery and susceptibility to use e-cigarettes and e-cigarette use. A representative sample of young adults (18–24 years of age), residing in California ($n = 1,280$), completed online surveys. Participants exposed to any e-cigarette product placement or imagery in music videos were more likely to report lifetime e-cigarette use and past 30-day use compared with participants with no exposure. Participants with greater levels of exposure were more likely to report lifetime e-cigarette use and past 30-day use compared with participants with lower levels of exposure.

<https://doi.org/10.1038/s41415-021-3104-y>

Musculoskeletal pain in hygiene students

Stambaugh J E, Calleros C, Siegel P, Nathe C. Evaluating the Prevalence of Musculoskeletal Neck Pain in Dental Hygiene Students. *J Dent Hyg* 2021; **95**: 58-62.

An early prevalence of musculoskeletal pain was observed in this sample population of dental hygiene students.

Poor ergonomics is one of the leading factors in developing musculoskeletal disorders. This study evaluated the level of forward neck flexion of dental hygiene students during manual scaling procedures while wearing magnification loupes and investigated the prevalence of musculoskeletal neck pain. A sample of second year dental hygiene students was recruited for this observational study ($n = 24$). A goniometer application was used to measure levels of neck flexion, while wearing dental loupes, 30 minutes into a manual scaling procedure. Participants completed a McGill Pain Questionnaire with a body diagram and an additional survey at the end of the session. All participants showed neck flexion exceeding 20° at the conclusion of a 30-minute manual scaling procedure. The majority (67%) were in a compromised range and 33% were in a harmful range. The top five pain descriptors identified in the pain questionnaire were aching, tiring-exhausted, throbbing, tender, and heavy. Pain was identified in the shoulder/trapezius (63%), cervical (50%), scapular (36%); and the participants reported pain ranging from 1 to 7.

<https://doi.org/10.1038/s41415-021-3103-z>

Self-assessment to reduce musculoskeletal disorders

Partido B B, Henderson R. Reducing the Risks for Musculoskeletal Disorders Utilizing Self-Assessment and Photography among Dentists and Dental Hygienists. *J Dent Hyg* 2021; **95**: 36-41.

Improving self-awareness for ergonomics through self-assessment can help reduce the risk of developing musculoskeletal disorders.

The purpose of this study was to determine whether feedback involving photography and self-assessments would improve the postures of dental professionals. A sample of dentists and dental hygienists was used for this randomised control study ($n = 50$). The Modified-Dental Operator Posture Assessment Instrument (M-DOPAI) was used for ergonomic evaluations of the randomly assigned control and experimental (training) groups over a four-week period. All participants were photographed and completed a M-DOPAI without viewing the photographs or receiving feedback at baseline. Participants in the control group independently completed a M-DOPAI without any additional photographs or feedback during weeks two and three. The experimental group had additional photographs taken and completed a M-DOPAI along with the principal investigator. The training group utilising photography resulted in improvements in ergonomic scores as compared to the control group.

<https://doi.org/10.1038/s41415-021-3105-x>